

DATASHEET
Version 20181206

Myoglobin, His, Human

Cat. No.: Z03319-10**Size:** 10.0 ug**Synonyms:** PVALB, MGC13548**Description:**

Myoglobin, a member of the globin family of proteins, is a cytosolic oxygen-binding protein that regulates the storage and diffusion of oxygen within myocytes. The largest expression of myoglobin is in skeletal and cardiac muscle. Myoglobin exhibits various functions in relation to the muscular oxygen supply, such as oxygen storage, facilitated diffusion, and myoglobin-mediated oxidative phosphorylation. Myoglobin is the primary oxygen-carrying pigment of muscle tissues. High concentrations of myoglobin in muscle cells allow organisms to hold their breath for a longer period of time. Diving mammals such as whales and seals have muscles with a particularly high abundance of myoglobin. Myoglobin is found in Type I, Type II A and Type II B muscle; however several studies indicate myoglobin is not found in smooth muscle.

Recombinant Human Myoglobin produced in *E. coli* cells is a single non-glycosylated polypeptide chain containing 166 amino acids. rhMyoglobin has a molecular mass of 18.7 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 MHHHHHHDDD DKMGLSDGEW QLVNHWGKV EADIPGHGQE
00041 VLIRLFKGHP ETLEKFDKFK HLKSEDEMK SEDLKKGAT
00081 VLTALGGILK KKGHHEAEIK PLAQSHATKH KIPVKYLEFI
00121 SECIIQVLQS KHPGDFGADA QGAMNKALEL FRKDMASNYK
00161 ELGFQG
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Source: *E. coli***Biological Activity:** Not Available**Molecular Weight:** 18.7 kDa, observed by reducing SDS-PAGE**Formulation:** Liquid after a 0.22 µm filtered solution in 20 mM Tris-HCl, 1 mM DTT, 100 mM NaCl and 20% glycerol, pH8.0.**Purity:** > 95% as analyzed by SDS-PAGE**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.**Storage:** Recombinant Human Myoglobin remains stable up to 6 months at lower than -70°C from date of receipt. Human Myoglobin should be stable up to 1 week at 4°C or up to 3 months at -20°C.